

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-12. (Cancelled).

13. (New) A fuel cell system comprising:

a fuel cell provided with an electrolyte membrane;

a circulation passage through which a cathode off-gas discharged from a cathode of the fuel cell is supplied to a passage for supplying an oxygen-containing gas to the fuel cell;

a flow control unit that controls a flow of the cathode off-gas in the circulation passage;

a stop control unit that stops the flow of the cathode off-gas in the circulation passage by controlling the flow control unit when the fuel cell system is stopped; and

a start-up control unit that controls the flow control unit after start-up of the fuel cell system until the fuel cell is brought into a predetermined operation state so as to hold the flow of the cathode off-gas in the circulation passage in a stopped state.

14. (New) The fuel cell system according to claim 13, wherein

the flow control unit includes an inlet that admits the cathode off-gas discharged from the cathode, a first outlet to which the circulation passage is connected, a second outlet through which the cathode off-gas is discharged to a passage other than the circulation passage, and a selector unit that selects between the first outlet and the second outlet for discharging the cathode off-gas admitted through the inlet;

the stop control unit closes the first outlet that has been selected by the selector unit so as to stop the flow of the cathode off-gas in the circulation passage; and

the start-up control unit holds the first outlet that has been selected by the selector unit closed so as to hold the flow of the cathode off-gas in the circulation passage in the stopped state.

15. (New) The fuel cell system according to claim 14, wherein

the flow control unit includes an inlet that admits the cathode off-gas discharged from the cathode, a first outlet to which the circulation passage is connected, a second outlet through which the cathode off-gas is discharged to the passage other than the circulation passage, and a selector valve having a valve body, which selects between the first outlet and the second outlet for discharging the cathode off-gas admitted through the inlet;

the stop control unit closes the first outlet that has been selected by the selector valve so as to stop the flow of the cathode off-gas in the circulation passage; and

the start-up control unit holds the first outlet that has been selected by the selector valve closed so as to hold the flow of the cathode off-gas in the circulation passage in the stopped state.

16. (New) The fuel cell system according to claim 14, wherein

the flow control unit includes the inlet that admits the cathode off-gas discharged from the cathode, the first outlet to which the circulation passage is connected, the second outlet through which the cathode off-gas is discharged to the passage other than the circulation passage, a first switching valve that allows the cathode off-gas admitted through the inlet to flow into the first outlet, and a second switching valve that allows the cathode off-gas admitted through the inlet to flow into the second outlet;

the stop control unit closes the first switching valve so as to stop the flow of the cathode off-gas in the circulation passage; and

the start-up control unit holds the first switching valve closed so as to hold the flow of the cathode off-gas in the circulation passage in the stopped state.

17. (New) The fuel cell system according to claim 13, wherein:

the operation state of the fuel cell comprises an amount of water contained in the electrolyte membrane; and

the start-up control unit holds the stopped state of the flow of the cathode off-gas until the amount of water becomes equal to or smaller than a predetermined amount.

18. (New) The fuel cell system according to claim 13, wherein:

the operation state of the fuel cell comprises an operation temperature of the fuel cell; and

the start-up control unit holds the stopped state of the flow of the cathode off-gas until the operation temperature becomes higher than a predetermined temperature.

19. (New) The fuel cell system according to claim 18, wherein the start-up control unit executes a start-up control based on a predetermined map such that a circulation amount of the cathode off-gas becomes zero when the operation temperature is equal to or lower than the predetermined temperature.

20. (New) The fuel cell system according to claim 13, wherein:

the operation state of the fuel cell comprises a total power generation amount accumulated from the start-up of the fuel cell; and

the start-up control unit holds the stopped state of the flow of the cathode off-gas until the total power generation amount exceeds a predetermined amount.

21. (New) The fuel cell system according to claim 13, wherein:

the operation state of the fuel cell comprises an elapsed time from the start-up of the fuel cell; and

the start-up control unit holds the stopped state of the flow of the cathode off-gas until the elapsed time reaches a predetermined time.

22. (New) The fuel cell system according to claim 13, wherein:

the operation state of the fuel cell comprises a hydrogen consumption amount obtained from the start-up of the fuel cell; and

the start-up control unit holds the stopped state of the flow of the cathode off-gas until the hydrogen consumption amount reaches a predetermined amount.

23. (New) The fuel cell system according to claim 13, wherein the stop control unit executes a stop control based on an outside temperature.

24. (New) A method of operating a fuel cell system comprising:

supplying an oxygen-containing gas to a fuel cell provided with an electrolyte membrane;

circulating a cathode off-gas discharged from a cathode of the fuel cell to a passage through which the oxygen-containing gas is supplied;

stopping a circulation of the cathode off-gas when the fuel cell system is stopped; and

holding the circulation of the cathode off-gas in a stopped state until the fuel cell is brought into a predetermined operation state after start-up of the fuel cell system.